

School Enrollment Projections for Shenendehowa Central School District

2016-17 School Year



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Capital District Regional Planning Commission

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About the Capital District Regional Planning Commission

Our Mission

The Capital District Regional Planning Commission (CDRPC) is a regional planning and resource center serving Albany, Rensselaer, Saratoga, and Schenectady counties. CDRPC provides objective analysis of data, trends, opportunities, and challenges relevant to the Region's economic development and planning communities. CDRPC serves the best interests of the public and private sectors by promoting intergovernmental cooperation; communicating, collaborating, and facilitating regional initiatives; and sharing information and fostering dialogues on solutions to regional challenges.

Our History

CDRPC was established as a regional planning board in 1967 by a cooperative agreement among the counties of Albany, Rensselaer, Saratoga, and Schenectady. Its original purpose was to perform and support comprehensive planning work, including surveys, planning services, technical services, and the formulation of plans and policies to promote sound and coordinated development of the entire Region. Over time, the mission of the Planning Commission evolved in response to changes in the Region's needs, funding sources, organizational structure, and information technology. While continuing to provide a wide variety of comprehensive planning services, CDRPC has also assumed the functions of Data and Information Center, Economic Development District, Foreign-Trade Zone Administrator, Clean Energy Communities Program Coordinator, and Water Quality Manager.



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Executive Summary

The 2016-17 School Enrollment Projections for Shenendehowa Central School District provides school enrollment projections through the 2021-22 school year. This report looks at key indicators such as 20-year enrollment trends, birth rates, residential housing activity, and more, as a basis for developing the enrollment projections. Some of the key findings of the report are as follows:

- While total enrollment has trended downward since 2008-09, it has been very slight compared to the relative number of students enrolled. In 2013-14, enrollment was 1.2% lower than the 2008-09 peak, and has rebounded since. In general, total enrollment has been remarkably stable for the last decade.
- Enrollment in Kindergarten has declined for most of the last decade. Recent years have seen a slight improvement, but enrollment remains below 600 students, while less than 10 years ago it was over 700 students.
- While enrollment in grades K-5 has been declining, enrollment for the 6-8 and 9-12 cohorts has been increasing. So far, the declines in K-5 have not matriculated into the higher cohorts.
- The number of births increased in 2014 to 702 from 672 in 2013 and 624 in 2012. 2014 marked the third straight year of increases, and the first time births topped 700 since 2005.
- Existing home sales are increasing. From 836 in 2014, to 889 in 2015, 2016 is on pace for over 900 homes sold. Existing homes are selling for a median price of \$287,500 in 2016, more affordable than many new homes.
- New home construction continues its brisk pace. The towns of Clifton Park and Halfmoon are centers of development, with activity shifting increasingly to Halfmoon. In Halfmoon alone, there are over 400 undeveloped lots that are available for either single family or multifamily units.
- Overall, enrollment is projected to increase moderately over the projection period to 9,994 students. This growth amounts to a 1.8% increase over 2016-17's enrollment.
- Enrollment increases will be most heavily concentrated in K-5. Survival multipliers suggest that this cohort, specifically grades 1 through 4, are seeing a strong influx of new students that are not accounted for in either birth data or Kindergarten. This suggests that new students are moving into the District at a higher rate than in previous years.
- Enrollment in grades 6-8. Enrollment will decline 7.8% by 2019-20 before rebounding by the end of the projection period. By 2021-22, enrollment is projected to be down only 1.7% from 2016-17.
- Meanwhile, enrollment in grades 9-12 will peak in 2017-18 before declining the rest of the period to 3,031, a decline of 3.6% from 2016-17.



Introduction

The Shenendehowa Central School District (the District) authorized the Capital District Regional Planning Commission (CDRPC) to prepare district-wide school enrollment projections annually for the 2014-15, 2015-16, and 2016-17 school years. This report is the final in the series and contains school district enrollment projections for the 2017-18 through 2021-22 school years.

The following is a description of the data, assumptions, activities, and trends that may influence the number of students enrolled in the Shenendehowa Central School District, as well as future enrollment projections.

A variety of data sets were evaluated leading to the preparation of a final set of projections and include the following:

- Historical enrollment trends;
- District grade-to-grade survival multipliers calculated from enrollment data in 5, 10, and 20 year increments;
- Annual school district birth data since 2002;
- District-wide housing data including total count, and types of homes;
- Residential building permit issuances from the primary overlapping municipalities;
- Annual existing home sales since 2014;
- Anticipated new residential building activity in the District;

The historical enrollment trends examine the patterns and trends in enrollment over the previous 20 years (**Table 1**). These patterns and trends allow CDRPC to better understand how enrollment has fluctuated over a generation of students. Patterns and trends for individual grades and total enrollment are examined alongside those of the three grade cohorts (K-5, 6-8, and 9-12) on **Table 2**. This examination allows for a clear understanding of where the District has been and where it is right now, and provides the foundation from which enrollment projections are based. Enrollment data was provided by the District as of the last week in October. For grades 1 through 12, students in regular classes and those special education students classified as “inclusion” are compiled into the enrollment for each grade. “Self-contained” students are accounted for separately and are not included in the enrollment with any particular grade. The only exception to this is kindergarten where “inclusion” and “self-contained” students are counted with the general population.

Grade-to-grade survival multipliers provide the building blocks from which enrollment projections can be calculated. A survival ratio is calculated by dividing the number of students in a grade in a given year by the number of students in the previous grade the year before. For example, if there are 100 1st graders in the 2000-01 school year, and 120 2nd graders in the 2001-02 school year, then the grade-to-grade survival ratio is $120/100 = 1.2000$. With enrollment data dating back to the 1979-80 school year, it is possible to determine short-term, medium-term, and long-term survival multipliers. These terms are categorized as 5-year, 10-year, and 20-year survival multipliers and are calculated by taking the average survival multiplier for a grade by the designated number of years. These averages are then used as a possible method for projecting future enrollment.

While the survival multipliers are straight forward for 1st grade through 12th grade, calculating



the survival ratio for kindergarten requires an extra step. Kindergarten survival multipliers were calculated using the historic number of births within the school district and comparing them to the number kindergarten students five years later. For instance, if there were 100 births in 2000 and five years later there were 120 kindergarten students, the kindergarten survival multipliers would be calculated as 1.2000.

Since the release of birth data (**Table 3**) always lags behind the calendar year by over a year (2000 birth data is not available until mid-way through 2002, for example) the number of births for the final two years of the projection period need to be estimated. In the case of the 2016-17 school year, enrollment projections begin with the 2017-18 school year and end with the 2021-22 school year. The most recently available birth data is for the year 2014, which provides CDRPC with a basis for calculating the number of kindergartners in the 2019-20 school year. In order to project the number of kindergartners in 2020 and 2021, CDRPC estimated the number of births in 2015 and 2016. This was done by finding the average number of births from 2002 through 2014, while also looking at recent trends in the number of births.

Historically, CDRPC calculated the number of births within the school district from a combination of births by municipality which included Clifton Park, Halfmoon, Waterford, Malta, Ballston, Round Lake, and Stillwater. However, since the District's boundaries do not coincide with the municipalities, this method was less than ideal. Beginning in 2002, the New York State Department of Health released birth data at the school district level. With data available through 2014 there are now 13 years of data from which patterns and trends can be determined, a sufficient amount of time for historical trends to be calculated.

A final note on the birth data; while birth data is available from 2002 through 2014, data is only available for the kindergarten classes from 2007 through 2016, meaning that the 2016-17 school year is the first time that ten years worth of Birth-to-Kindergarten survival multipliers are available for future projections.

Table 4 contains housing data from within the District. This data is compiled from a variety of sources including the 2000 Census, and the 2010-14 American Community Survey. Previous enrollment studies provided the total number of housing units in the District from 1980 and 1990. The 2000 and 2010 Census provides an exact count of the housing units in the District, while the American Community Survey provides an estimate of the total housing units and come with a margin of error. **Table 4** provides a breakdown of housing units organized as Single Family (both detached, and attached), 2 Unit, 3 or 4 Unit, 5 or More Units, and Mobile Homes.

Where **Table 4** is designed to provide a macro view of the District's housing stock with a detailed overview of the composition of the housing types; **Table 5**, in contrast, is designed to give a view of the District's housing at the Town level. At this vantage point, individual town building permit issuances can be compared on an annual basis. While **Table 4** provides the bookends of a time series comparison (how many homes were within the District at two separate points in time), **Table 5** provides the ability to view how the trends have fluctuated on an annual basis. **Table 5** provides permit issuances since 1996 for the towns of Clifton Park and Halfmoon. Similarly to the organization in **Table 4**, building permit issuances are organized into Single Unit, 2 Unit, 3 or 4



Unit, and 5 or More. While only one permit is required for a building of multiple units, CDRPC has counted the total number of units per permit. Therefore, one permit for a 2 unit duplex has been counted as two units on **Table 5**.

Table 6 looks at existing home sales within the District. Similar to the challenges posed from measuring the number of births, existing home sales have historically only been measured at the municipal level. Since municipal boundaries and school district boundaries often do not align, determining the number of home sales within the District by looking at home sales in the municipality was less than ideal.

Working in conjunction with the *Greater Capital Association of Realtors*, CDRPC can report the Multiple Listing Service (MLS) data at the school district level. CDRPC began the transition to this new system in late 2014 and, as a result, historical data is unavailable prior to that year. This new system tracks various metrics including median & average sale price, total number of units sold, and the average number of days on market.

Table 7 compiles all of the collected data and presents enrollment projections for the next five years. **Table 7** organizes the data by both individual grade, as well as by age-cohorts (K-5, 6-8, 9-12). This is the primary table of the whole report and distills all of the information discussed from this report into one easy to read table. Birth data, historical trends, survival multipliers, housing activity, are all factored into the calculations and result in the projections provided.

New residential activity is handled in two sections of this study. The **Residential Building Activity** section provides an overview of approved and proposed new residential developments of 5 or more units located within the District. **Appendix A & B** provide a detailed overview of the current state of activity for all the approved developments, and provides a projected build-out schedule for the next five years.

Depending on the anticipated level of development, CDRPC may utilize demographic multipliers to assist in projecting future enrollment. In cases where development is anticipated to exceed recent norms for an extended period of time, demographic multipliers can be implemented to project the number of children generated by the new housing. These demographic multipliers account for such details as the number of bedrooms, the value of the housing unit, type of housing unit, and can estimate the number of children, by age group, that the housing development will produce. This method of projecting enrollment is best utilized in areas that are seeing unprecedented levels of building activity. Only after examining the anticipated building activity will it be clear if utilizing a demographic multiplier will be necessary.



Historical Enrollment Trends

The 20-year enrollment trend (**Table 1**) for the District's total enrollment, shows very strong growth. The 20-year low for enrollment occurred in the 2000-01 school year when enrollment declined to 9,042. Following this, enrollment rebounded aggressively, adding 827 new students over the next eight consecutive years. At its peak in 2008-09, enrollment reached 9,869 students, a 9.1% increase in just eight years. In four of those eight years, year-to-year enrollment increased by triple digits, and exceeded 180 new students in the 2004-05 school year.

Since peaking in 2008-09, enrollment has leveled off. Between 2008-09 and 2013-14, the District experienced enrollment declines to 9,747 students. While a decline of 122 students in five years may seem to be significant, this amounted to a decline of only 1.2% from 2008-09. Since 2013-14, enrollment has rebounded to 9,820 students in 2016-17; 49 (-0.5%) fewer students than the 2008-09 peak.

While total enrollment has either inclined or stabilized for most of the last 20 years, enrollment in kindergarten has shown a great deal more volatility. From the 1997-98 school year, through the 2008-09 school year, increases in kindergarten enrollment largely mirrored that of the District's total enrollment. After declining to 579 students in 2000-01, kindergarten enrollment increased through the 2005-06 school year, plateauing over 740 students and peaking at 752. The plateau ended in 2007-08 when enrollment declined to 704, a 6.4% 2007-08 peak. This was the beginning of a short term trend that saw enrollment in kindergarten decline by over 200 students by 2012-13. That year saw enrollment at 533 students, 219 (29.1%) fewer students than the 2005-06 peak. Since then, enrollment in kindergarten has stabilized and shown some minor improvement. 2016-17's kindergarten class was 584 students, the largest since 2010-11, but was still 22.3% smaller than kindergarten's peak enrollment.

Enrollment by grade cohort (**Table 2**) illustrates how enrollment trends by the three cohorts influence trends in the District's total enrollment. The 20-year enrollment in K-5 shows that, in the beginning of the time period, enrollment was on the decline. In 2001-02, enrollment in the cohort reached a 20-year low with only 4,057 students. For the next four consecutive years, and six of the next seven years, enrollment would see year-to-year increases, and would peak at 4,559 in 2008-09, 502 (12.4%) more students in seven years. Since peaking, K-5 enrollment has diverted from the District's overall enrollment trend noticeably. While the District's total enrollment has remained stable, K-5 enrollment has declined sharply, falling to 4,118 in 2015-16, only 61 students more than the 20-year valley from 2001-02. 2016-17 saw a minor improvement to 4,160, but this is still 399 (8.8%) students below the peak.

The 20 year enrollment for grades 6-8 has followed a different trajectory than that of K-5. From 1997-98 through 2008-09, enrollment fluctuated more so than it did for K-5, declining to as low as 2,131 in 2002-03, and as high as 2,296 in 2006-07. Consistent enrollment gains would not arrive until 2009-10 when enrollment would reach 2,282. From 2009-10 through 2013-14, enrollment would increase by 171 (7.5%) students, setting a new peak for enrollment. Since reaching the 20 year peak, enrollment has trailed off slightly, and in 2016-17 was 28 (1.1%) students below 2013-14's enrollment.

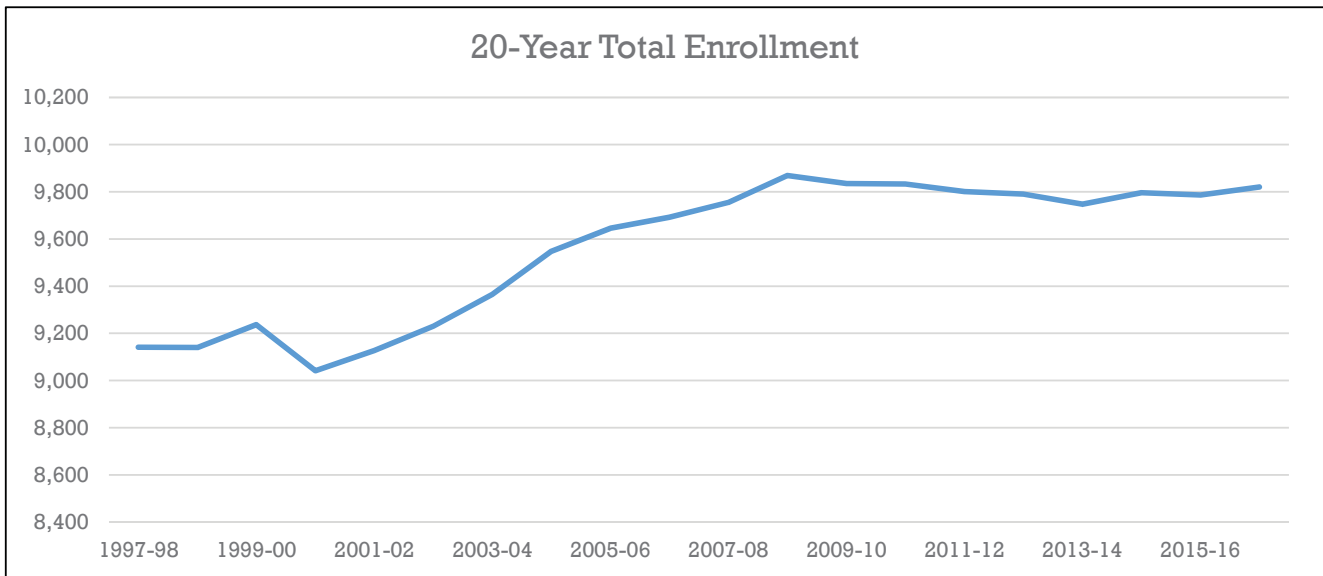


Figure 1. 20- Year Total Enrollment: The 20 year history for enrollment shows the steep enrollment incline of the early Aughts (2000 to 2008). After peaking at 9,869 students, enrollment entered into a period of slight decline. The last three school years, however, have seen enrollment rebound with it now approaching the 20 year peak.

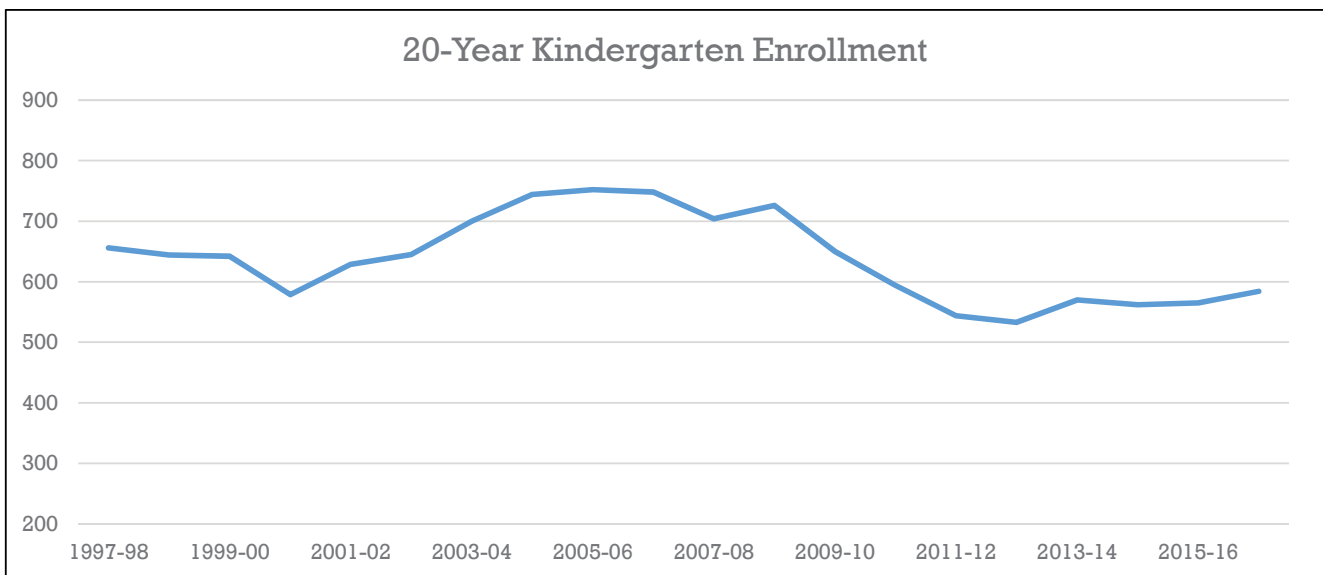


Figure 2. Kindergarten Enrollment: Enrollment in Kindergarten plateaued in the mid-Aughts before declining sharply. In recent years, enrollment has increased slightly from its low in 2012-13. Despite the increases, enrollment has failed to exceed 600 students since 2004. With only half day Kindergarten, the District does have some difficulties attracting students, so as the number of births slumped after 2004, it was inevitable that enrollment in Kindergarten would decline accordingly.



Enrollment for grades 9-12 has been on a 20 year upward trend. Setting aside year-to-year fluctuations, the trend has been of growth. In 1997-98, enrollment in the cohort was 2,636 students, since then enrollment has averaged 27 new students annually, almost a full additional class, and set a new all-time enrollment peak in 2015-16 with 3,167- an increase of 531 (20.1%) students from 1997-98. 2016-17 enrollment was down slightly (.7%), but that does not mean that enrollment growth has ceased. In fact, it is likely that the cohort is just beginning to enter a period of stabilization based upon historical trends in the K-5 and 6-8 cohorts.

The fact that K-5 enrollment has experienced prolonged declines that have, so far, not matriculated upward into the 6-8 cohort, deserves to be explored. There are two classes whose trends are very interesting, the 2007-08 and 2011-12 kindergarten classes. The 2007-08 kindergarten class consisted of 704 students while the 2011-12 kindergarten class consisted of 594 students, a difference of 107 students. One would expect that this 107 student difference would manifest itself in smaller classes as the kindergarten class of 2011-12 matriculated upward, but this did not occur. While growth is anticipated for all kindergarten classes, the 2011-12 kindergarten class has shattered recent trends. From kindergarten to 6th grade, the 2007-08 class increased by 11.6% while the 2011-12 kindergarten class increased by 34.0%. This level of growth was able to offset the initial difference of 107 students, and prevented the 6-8 cohort from experiencing similar enrollment declines as K-5.

This trend in enrollment growth from kindergarten to 6th grade in two classes spurred an examination into the overall relationship between the size of kindergarten classes, and their growth in enrollment. When looking at actual enrollment change from kindergarten to 6th grade (not percentage change), initial findings seem to indicate that there is an inverse relationship between the number of kindergarten students and the number of students added as that kindergarten class matriculates upward. More research is required, but it seems that large classes of kindergarten students add fewer new students as they matriculate to 6th grade, while smaller kindergarten classes add more students. Since the 1979-80 school year, the general trend is that as kindergarten enrollment increases, fewer students are added from 1st through 6th grade. But in years where kindergarten enrollment decreases, the number of students added from 1st through 6th grade increases. Again, this is examining actual change, and not percent change; it would not be a surprise that larger kindergarten classes have a smaller percent change as they matriculate. The two smallest kindergarten classes since 2000-01 had 594 and 579 students, through 6th grade they added 202 and 169 students respectively. Conversely, the two largest kindergarten classes of 752 and 748 students added 47 and 82 new students respectively through 6th grade.

Generational Enrollment Patterns

In an attempt to better understand the long term trends in enrollment, CDRPC examines all available data related to total enrollment- including data beyond the aforementioned 20-year window. As more historical data is collected, long term patterns and trends may be discerned that would otherwise be hidden by the confines of the 20-year window. While the 20-year view of enrollment allows for a detailed understanding of the trends *within* a generation of students, the generational enrollment data will allow for an analysis of the District's enrollment trends *between* generations.

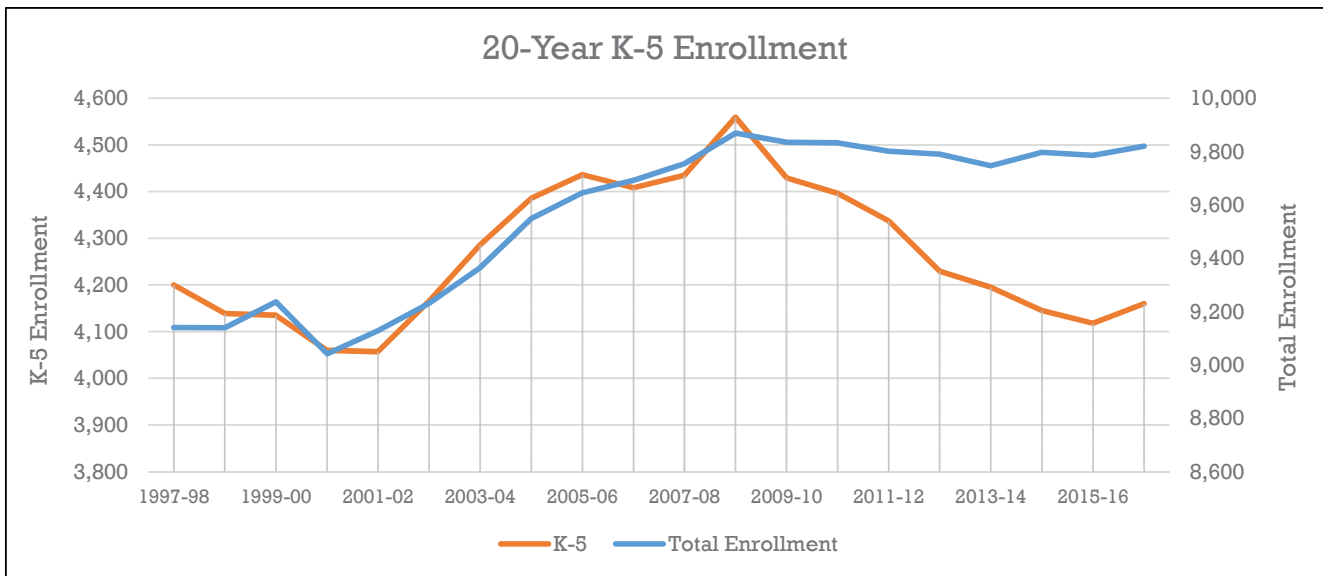


Figure 3. 20-Year K-5 Enrollment: As enrollment in grades K-5 increased after the 2001-02 school year, it mirrored enrollment increases district wide. Both K-5 and Total Enrollment peaked in 2007-08; but their paths diverged afterwards. While both saw enrollment declines, the declines experienced by K-5 were more dramatic than the declines in total enrollment.

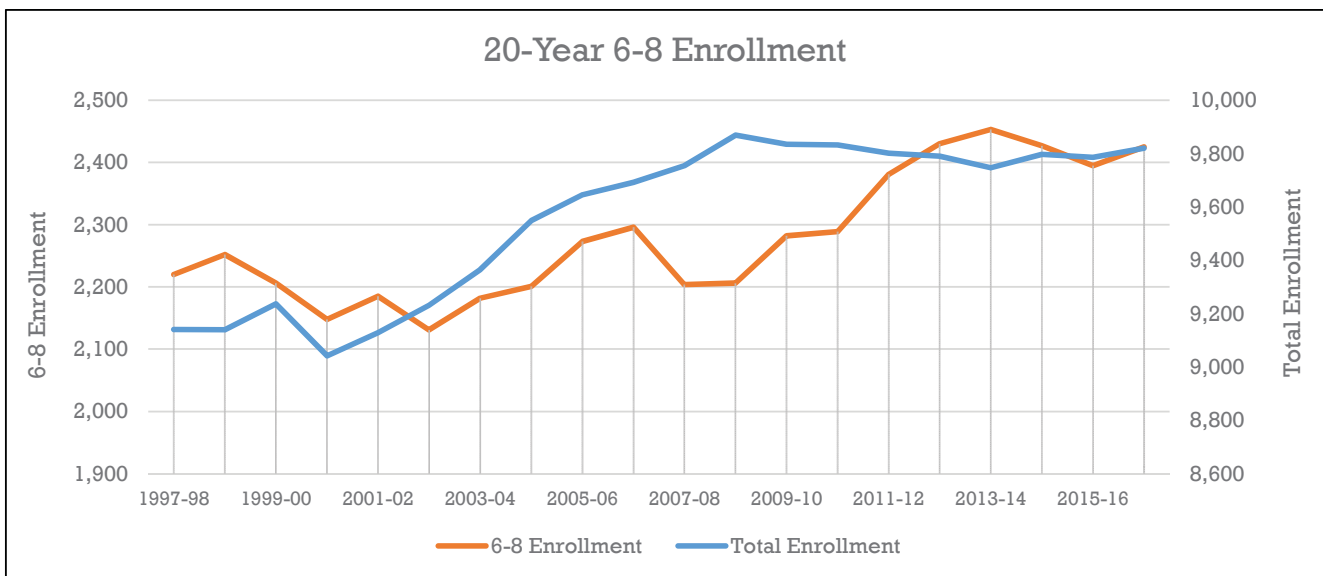


Figure 4. 20- Year 6-8 Enrollment: Peak enrollment in grades 6-8 occurred five years after total enrollment peaked. Since enrollment peaked for grades 6-8, enrollment has declined slightly but has avoided any sharp declines. Keeping in mind the sharp enrollment declines of K-5, Figure 4 shows that grades 6-8 have somehow avoided the declines from matriculating upward and depressing enrollment.



With 42 years of total enrollment data available, it is possible to see how the influence of various generations of students has impacted enrollment. This is perhaps the most important element that the generational enrollment history can provide; the ability to plot an entire enrollment cycle- a cycle that will stretch across decades and touch multiple generations of students. When measured by the entrance and exit of various generations of children, a full cycle of enrollment can last longer than 20 years.

In order to satisfactorily plot and understand the changing patterns of generational enrollment, it is useful to both define the generations of students that have proceeded through the District, and discuss the societal structures that influenced family creation.

Since the 1979-80 school year, parts of four generations of children have been students. While typically a “generation” is thought to be 20 years, there is no single definition for how long a generation can last. Furthermore, outside of the Baby Boomers, clearly defined start and end dates for generations are disputed. The definitions below attempt to identify each generation with a rough start and end year. Since only the Baby Boomers are clearly defined, all subsequent generations are established from the end dates of the Boomers in 1964.

The Baby Boomers: The children born during the Post-War boom, these children are popularly grouped together as born between 1946 and 1964. This generation is well known for the explosion in births that occurred after the war and are a cultural cornerstone.

Generation X: This generation of children is roughly described as being born between 1965 and 1982. Gen Xer’s are sometimes associated with the “Baby Bust” due to the sharp decline in the number of births that had defined the Boomers.

Millennials: Born roughly between 1983 and 2001, this generation is largely responsible for the enrollment increases of the 1990s. Composed primarily of the children of the Boomers, this generation is sometimes thought of as an “echo” of their parents.

Generation Z: These children, born since 2002, have only recently begun to influence enrollment statistics. Due to their timing with severe economic contractions and foreign wars, these children are sometimes compared to the Silent Generation that preceded the Boomers. This generation is

Year	Avg. Age of 1st Birth	General Fertility Rate
1960	21.8	3.65
1965	21.9	2.91
1970	22.1	2.48
1975	22.3	1.77
1980	23.0	1.80
1985	23.5	1.84
1990	23.8	2.08
1995	23.8	1.98
2000	24.5	2.06
2005	25.2	2.06
2010	25.4	1.93
2014	26.3	1.86

Source: Average Age of First Birth: *Vital Statistics of the United States, 2003, Volume I, Natality*. Centers for Disease Control and Prevention.

Data for 2005 through 2010: *National Vital Statistics Report, Vol 56, #6*. Center for Disease Control and Prevention. December 5, 2007. And *National Vital Statistics Reports, Vol 61, #1*. Center for Disease Control and Prevention. August 28, 2012.

Fertility Rate: Between 1960 and 2012, the world average fertility rate halved to 2.5 births per woman. Suzuki, Emi. *World Development Indicators*; from The World Bank

US Birthrate Declines for Sixth Consecutive Year, Tamar Lewin; New York Times. December 4, 2014

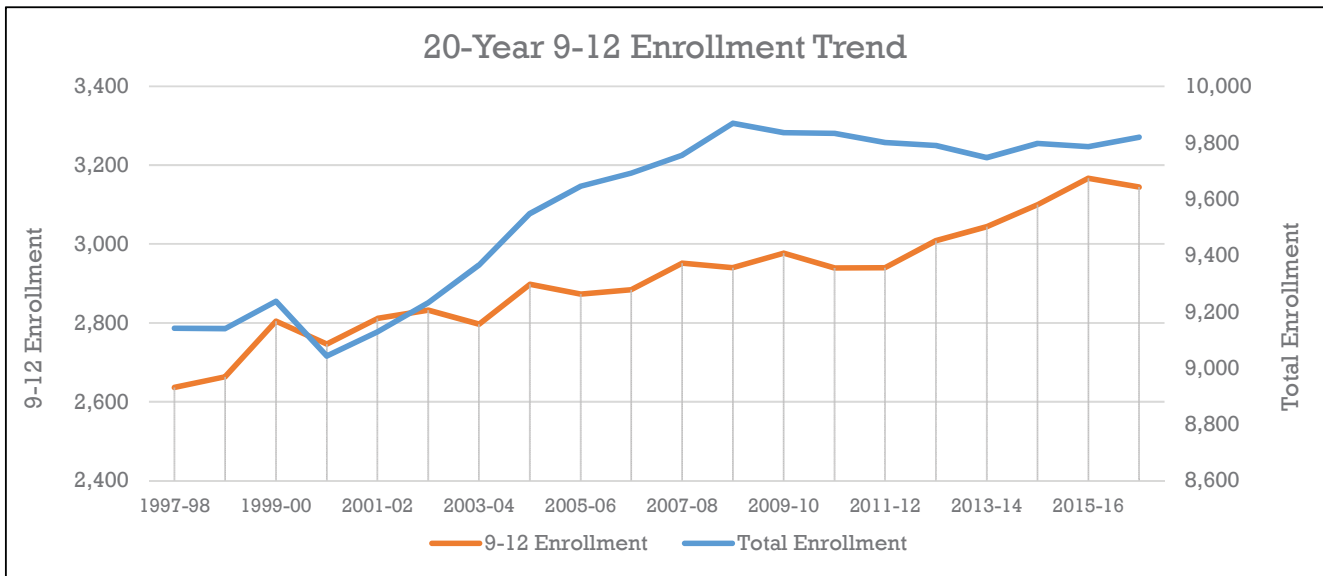


Figure 5. 20-Year 9-12 Enrollment Trend: The 20-year trend in enrollment for grades 9-12 is one of almost constant increase. The persistent increases from this cohort may help to explain how total enrollment avoided sharp declines after peaking in 2008-09. The enrollment growth in the 9-12 cohort largely compensated for the persistent declines in K-5.

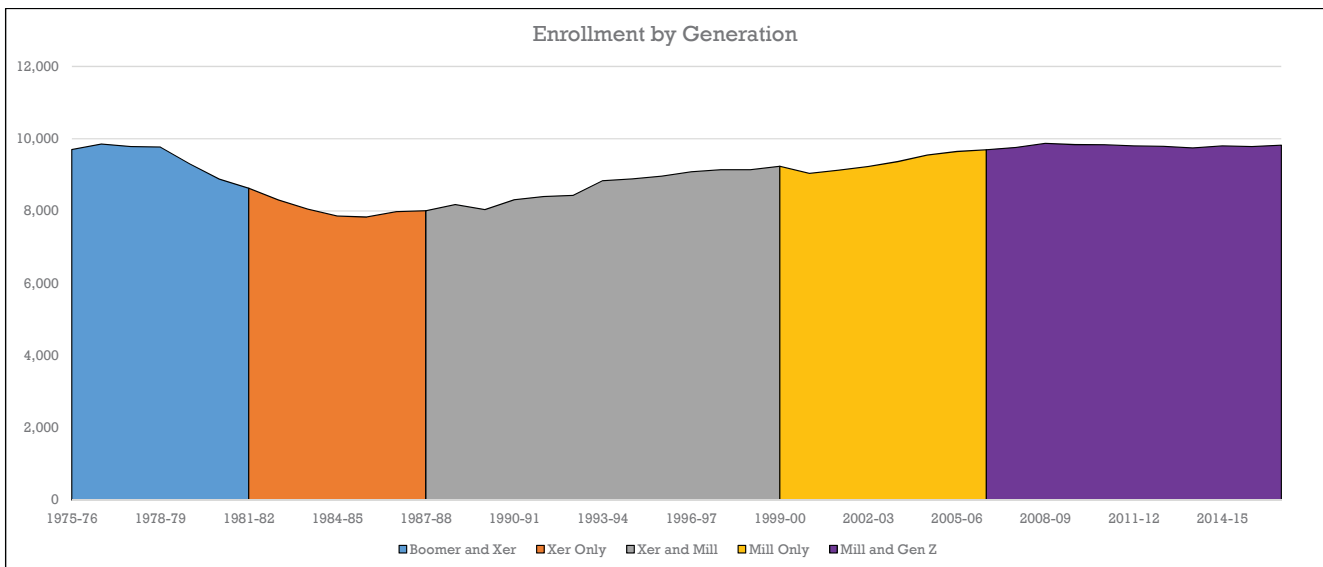


Figure 6. Enrollment by Generation: In the late 1970s, the last of the Baby Boomers were matriculating their way through the school district. As classes of Boomers graduated, they were replaced by classes of Gen Xers, a much smaller generation. The results were a substantial decline in enrollment, declining to less than 8,000 students. A long and steady trend of increasing enrollment would begin in earnest with the introduction of the Millennials into the District in the late 1980s. Since that time, over three generations of students have come and gone, and yet enrollment does not show signs of entering a valley like it did in the early 80s. Even with the introduction of Generation Z, a smaller generation than the Millennials, the District has avoided any sharp contractions. This is a testament to the popularity of the District as it has avoided sharp enrollment declines despite serving a generation of students that are smaller than the Millennials that preceded them. This trend is unlike nearly any other district in the Region.



smaller than the Millennials and are primarily the children of Gen Xers.

With the generations defined, exploring the fluctuations in the average age of a woman's first birth, and the general fertility rate, may help to understand how enrollment has ebbed and flowed, and provide insights into what may be expected in the near future. In 1960, the average American woman was having her first child just shy of her 22nd birthday. Concurrently, the average number of children per woman was 3.65. Assuming 1960 was similar to previous years, this explains the high number of children associated with the Baby Boom, women were starting families at a young age and having more than 3 children on average.

Five years later in 1965, a year after the end of the Baby Boom, the average age at which a woman was having her first child had remained stable, but her fertility rate had declined to less than three children on average. Only ten years later, in 1975, the average age had climbed slightly to just over 22 years old, but the fertility rate had declined dramatically to 1.77 children per woman on average, a 51.5% decline in the fertility rate from 1960. This rate remains one of the lowest ever recorded and helps explain the "Baby Bust" that define Generation X.

Since 1975, there has been a slight rebound in the fertility rate, approaching or exceeding 2.0. But that rebound has been tempered by the fact that the average age of a woman when she has her first child has climbed steadily. From 1975 to 2014, the average woman is waiting four years longer to have her first child. While four years may not seem to be a noteworthy increase, when it is paired with lower fertility rates it creates a situation in which the children who are expected to replace graduating students are late in arriving and aren't arriving in sufficient numbers to maintain enrollment rates.

Beginning in 1980, fertility rates saw a modest improvement and pushed upwards of 2.0 through 2005. Much of this period resulted in children who are classified as Millennials, a very large generation that reflects their Boomer parents. As Figure 6 shows, by 1988-89, the Generation Xers had been in school for a handful of years, but they were now being joined by the Millennials. Just a few short years earlier, before the Millennials entered school, enrollment had been dependent on a single generation of children, a generation that was small in comparison. Buoyed by the arrival of the Millennials, the District's total enrollment began to increase throughout the 1990s.

By 2000, the last of the Xers had graduated from high school, leaving Millennials alone to comprise the student population. The generation is so large, however, that enrollment continued to rise, and in the final year before Generation Z would enter school, Millennials alone had carried enrollment to 9,692 students in 2006-07.

2007-08 saw the introduction of Generation Z into the school district in the kindergarten classes. For most school districts, the introduction of Generation Z marks the beginning of recent enrollment declines, but Shenendehowa has seen the opposite. In 2008-09, District wide enrollment reached an all time peak with 9,869 students. Since then, as more classes of Millennials graduate and are replaced by classes of Generation Z, there has been a slight decline but, as stated earlier, enrollment is extremely stable.

Looking at the data in this manner does help set the stage for what the District should expect on



a macro level over the next handful of years. In 2016, the oldest Millennial is roughly 33 years old, far older than the average age for having her first child. However, Millennials are, by and large, the most highly educated generation in American history. We know that, as a rule, the more educated a woman, the longer she waits to have a child and the fewer children she has.

But this fact alone does not tell the full story of Millennials and family creation. The oldest Millennials who decided to go on and get a four year degree would have been graduating in roughly the Spring of 2005. For these Millennials, and for many that followed shortly behind them, they would have been entering the workforce just before, or right as, the worst recession since the Great Depression rocked the economy. The Great Recession of 2007-08 has had long term ramifications on Millennials, ranging from short term struggles with unemployment, to long term struggles with earnings potential that were damaged due to long term depression of wages.

A highly educated generation, that did not enter the workforce with a high degree of confidence or certainty in their economic future, was primed for delaying family creation. However, the economy for many has been improving, unemployment is low which puts pressure on wages to increase, meanwhile the biological clock is still ticking. It is possible that Millennials are primed for a surge in births as the older members of the generation who put off family creation due to outside pressures, find themselves in position to start a family. While it is unclear when, or even if, this will happen, we can be confident that if those Millennials who haven't had children begin to do so there will be a noticeable surge in the number of births.

For a district like Shenendehowa, which has experienced enrollment growth unparalleled anywhere else in the Region, the prospect of Millennials beginning to start families could result in virtually no enrollment valley such as what was experienced in the 1980s. It is possible that, given the popularity of Shenendehowa schools, broaching 10,000 students may not be in the very distant future.

Actual vs. Projected Enrollment & Survival Multipliers

In 2015 CDRPC projected enrollment for Shenendehowa Schools in the fall of 2016 to be 9,679 students, including self-contained students. In large part, this projection was built around an anticipated small Kindergarten class, as well as a generally small K-5 cohort. In reality, District enrollment was 9,820 in 2016, resulting in projections falling short by 141 (1.4%). Normally, a difference of 1.4% for a district of Shen's size is a solid projection, but the 1.4% difference in this case changes the trend line. As projected, the 2016-17 school year should have had the lowest enrollment since 2005-06, but in actuality it had the highest enrollment since 2010-11.

So why the difference? The first place to look is at Kindergarten enrollment where projections were low by 62 (10.6%) students. When the total difference between projected and actual enrollment is 141 students, 62 students in kindergarten alone account for 44% of the missing students. Projected at 522 students, enrollment was predicated on the fact that births from five years prior reached only 607 (**Table 3**), down significantly from previous years. In reality, Kindergarten enrollment in 2016-17 was 584. This resulted in a Birth-to-Kindergarten survival multiplier of 0.9621, the third strongest multiplier in the ten years of available data, and the strongest since 2008-09. In short, such a strong survival multiplier is well outside the norms, and accounts for the larger than



Actual Enrollment vs Projected				
Grade	2016-17	Projected	Difference	Percent Difference
K	584	522	-62	-10.6%
1	710	678	-32	-4.5%
2	724	703	-21	-2.9%
3	724	712	-12	-1.7%
4	695	677	-18	-2.6%
5	723	737	14	1.9%
6	796	784	-12	-1.5%
7	790	789	-1	-0.1%
8	839	829	-10	-1.2%
9	797	805	8	1.0%
10	827	810	-17	-2.1%
11	782	785	3	0.4%
12	738	738	0	0.0%
Grade	2016-17	Projected	Difference	Percent Difference
K-5	4,160	4,029	-131	-3.1%
6-8	2,425	2,402	-23	-0.9%
9-12	3,144	3,138	-6	-0.2%
Subtotal	9,729	9,569	-160	-1.6%
Self-Contained	91	110	19	20.9%
Total	9,820	9,679	-141	-1.4%

Survival Multipliers				
Grade to Grade	2016-17	5-year	10-year	20-year
Birth to K	0.9621	0.8744	0.8812	N/A
K to 1st	1.2566	1.2077	1.1419	1.1037
1st to 2nd	1.0561	1.0409	1.0209	1.0159
2nd to 3rd	1.0417	1.0368	1.0253	1.0196
3rd to 4th	1.0404	1.0163	1.0164	1.0103
4th to 5th	0.9918	1.0108	1.0111	1.0127
5th to 6th	1.0311	1.0189	1.0162	1.0170
6th to 7th	1.0154	1.0148	1.0135	1.0107
7th to 8th	1.0133	1.0016	0.9978	0.9979
8th to 9th	1.0101	1.0143	1.0152	1.0220
9th to 10th	1.0012	0.9841	0.9792	0.9717
10th to 11th	0.9631	0.9687	0.9756	0.9681
11th to 12th	0.9973	0.9942	0.9876	0.9651

projected Kindergarten class. Why the survival multiplier was so much stronger than anticipated is not immediately clear, but it could be indication that families with young children are moving into the District at a rate not anticipated. These children would not have been captured in the birth data, and would be virtually unknown to us. With this emerging trend in mind, CDRPC has adjusted the survival multipliers according to compensate for the recently higher rates.

Aside from kindergarten, projections were by and large accurate. Projections for K-5 were low by 131 (3.1%) students, mostly related to the unanticipated kindergarten class. For grades 1-5, projections were low by a total of 69 students, roughly two full classes across five grades with over 3,500 students.

Projections were more accurate for grades 6-8 and 9-12, both of which were off by less than 1%. Only projections for 10th grade were off by more than 2%, or 17 students. 12th grade, in fact, was projected with perfect accuracy.

Examining the survival multipliers on a grade by grade basis, it further explains why projections for K-5 were off. The survival multipliers for kindergarten through 4th grade were all well above their historic averages. This was especially true for 4th grade which saw a survival multiplier for the 2016-17 school year of 1.0404, well above five, ten, and twenty year average.

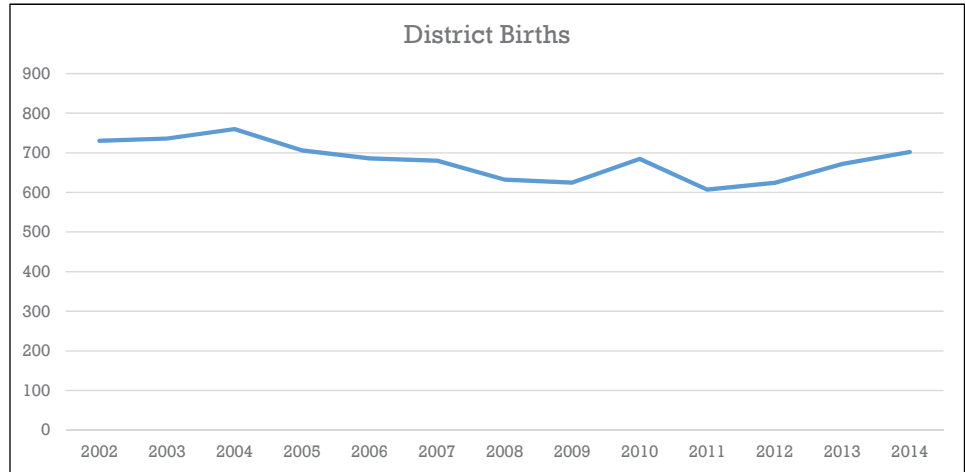
While it is true that 2016-17's survival multipliers for grades K-4 were very strong and well above historical averages, they do represent a continuation of a trend of increasing survival multipliers. Multipliers have been on a general upward trend for grades 1 through 4 for much of the last decade.



The increases have not always been linear, and they have at times been slight, but they have been persistent enough that they are now unmistakable. This suggests that families with school age children are moving into the District in rates higher than previous years, therefore inserting new students into the District that aren't reflected in the more long term survival multiplier averages.

School District Births

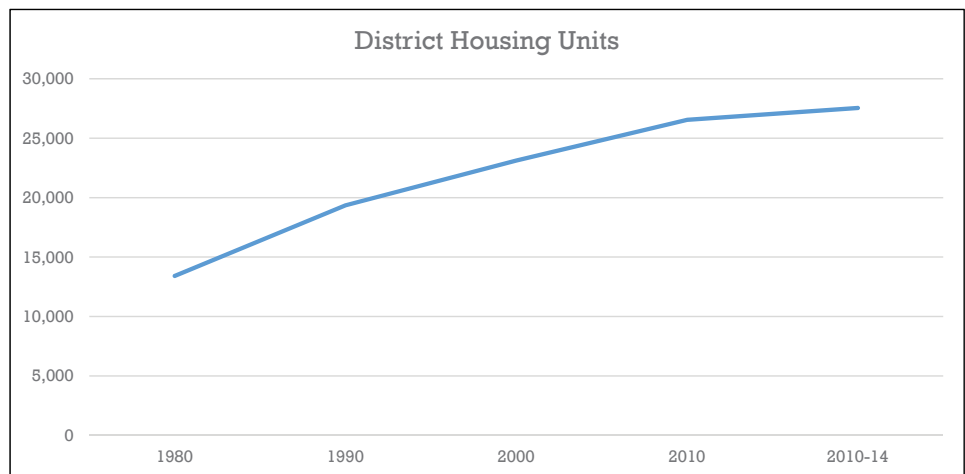
As a general rule, the number of births in the District has been on the decline for most of the last 13 years. The highest number of births recorded was in 2004 with 760, after which the number of births declined rapidly. For the next five consecutive years, and for six of the next seven, the number of births declined year-to-year and bottomed out at 607 in 2011. 2011 may prove to have been the floor for births, since then births have rebounded for three consecutive years and topped 700 in 2014 for the first time since 2005.



In order to complete the projections through the 2020-21 school year, the number of births for 2014 and 2015 needed to be estimated. CDRPC utilized the average number of births over the previous five years as a basis for estimating future births, and then adjusted accordingly to compensate for the recent trend upward. In this case, CDRPC projects that there will be 690 births within the school district in both 2014 and 2015 school years. If housing sales continue to increase, then it is possible that births could increase even more.

Buildings, Building Permits, & Existing Home Sales

Table 4 provides a breakdown and count of the housing units within the District. Since 1980 residential development within the District has exploded. In 1980, there were an estimated 13,412 housing units, by 1990 that had increased by almost 6,000 units to 19,356, an increase of 44%. From 1990 to 2000,





housing construction slowed slightly from the breakneck pace of development during the previous decade. The 2000 Census recorded 22,126 housing units, a 64.0% increase from 1980, but “only” a 14.3% increase from 1990. By 2010, development had increased again, adding 4,422 (19.9%) housing units from the 2000 Census and 13,136 (97.9%) from 1980, totaling 26,548 housing units. With the 2010-14 American Community Survey providing a breakdown of the housing types, we can now more closely examine the character of the District’s housing. Not surprisingly, single family detached homes dominate the District, accounting for 60.1% of all housing. The District’s preponderance of single family homes helps to explain the relationship between enrollment and the number of births since single family homes have historically produced the highest number of children of any housing type.

Table 5 helps put the building activity from **Table 4** into context. While the District itself saw a significant increase in housing units from 2000 to 2010, much of that activity can be pinpointed to earlier in the decade before the economic recession. For the five year period from 2000-2004 the towns of Clifton Park and Halfmoon combined for an average of 400 new residential units a year; however, from 2005-2009 the two towns combined for an average of 254 permits annually, a decline of 36.5%. Since 2010 the area has generally seen an improvement in the housing market, but it has been a tepid recovery. The two towns combined for 412 building permit issuances in 2013, but just 204 in 2014 and 272 in 2015. Since 2007, multifamily units have become more popular and are accounting for a higher percentage of new construction. It is not yet clear what impact this could have on enrollment since, historically, multifamily units tend to produce fewer children than single family homes.

Individually, Clifton Park has experienced a sharper decline in permit issuances than Halfmoon. From 2000-2004 Clifton Park averaged 278 issuances a year, but from 2005-2009 it averaged just 73. From 2010-15 the town hasn’t shown much in terms of a recovery, averaging 63 permits annually. This slowdown in the area’s residential building activity suggests that the sale of existing homes may play a larger role in future enrollment. Conversely, Halfmoon’s building permit issuances has eclipsed Clifton Park’s. From 2000-2004, Halfmoon averaged 121 building permit issuances before increasing to an average of 180 building permits from 2005-09. This has further increased, as from 2010-15 the Town has averaged 229 permits annually.

In terms of existing home sales (**Table 6**), during 2014, there were 836 existing home sales with a median sale price of \$280,250 and an average days on market of 66 within the School District. This improved to 889 units in 2015, with both average and median sale prices remaining steady. 2016 is shaping up as another strong year for existing home sales. It’s important to note that the figures for 2016 are only for January through August, but they are on pace to exceed those of 2015. Through August, 623 homes had been sold, and the average and median sale prices were up slightly from previous years, furthermore the average days on market was down to 50. On average, 78 homes were being sold each month in 2016, up from 74 in 2015 and 70 in 2014.



Residential Building Activity

The following is the most recent status report of approved and proposed single and multiple family subdivisions in the School District. For each community, the list includes an alphabetized listing of approved subdivisions. **Appendix A** has a complete listing of approved major single-family subdivisions, with a projected construction schedule for each project. **Appendix B** has a complete listing of approved major multi-family subdivisions (apartments, townhomes, and condominiums), with a projected construction schedule for each project. Subdivisions for which final approval is pending are not included in the appendices but are included in the descriptions below.

Town of Ballston

Approved Residential Developments

1. **Estates at Kelley Farm.** This 133 lot subdivision located on East Line Road, south of Chapel Hill, has 7 units completed or under construction. This is expected to be a slow developing community.
2. **Timber Creek Preserve (Phase 2).** Phase 2 has received approval, with an additional 99 units: 67 single-family and 32 townhomes. Construction is beginning and 5 units are currently under construction.
3. **Timber Creek Preserve (Phase 3 & 4).** These phases, consisting of 95 single family homes, 26 duplexes, 140 apartments, and 48 townhouses, have been approved but there is not time table for their construction to begin.

Town of Ballston

Proposed Residential Developments

1. **Estates at Kelley Farm** (Traditional Neighborhood Development concept). This 99 lot subdivision is in the concept phase and is still several years off before homes are built.

Only a small portion of the Town of Ballston is within the Shenendehowa School District, but if sewers become more widely available, there is room for more development opportunities. There are a total of 528 unbuilt lots in approved subdivisions within the Town of Ballston, 283 of which are slated to be single family homes.

Town of Clifton Park

Approved Residential Developments

1. **Bridlewood Ridge.** This 32-lot subdivision of single family homes located on Crescent Road has 26 units completed or under construction.
2. **Boni Miller Road.** While approved, this 9 lot subdivision has no timetable for construction.



3. **Carlson Farm.** This 44 unit subdivision of single family homes has been completed.
4. **Diamond Point.** This 10 lot subdivision off Clifton Park Center Road is early in development with 3 units under construction.
5. **Heritage Point.** This 103 lot single family subdivision off of Grooms Road has 21 units completed or under construction.
6. **Honey Hollow.** Located on Route 146, 4 of this development's 33 units are under construction.
7. **Kain Preserve.** 12 homes have been constructed at this 18-lot subdivision on Longkill Road.
8. **Mackey Kendra Drive Extension.** This 8 lot extension to Southwick Meadows has 2 completed units.
9. **Pickett Lane.** Development of this subdivision continues slowly. As of September 2016, 1 home has been completed.
10. **Rolling Meadows.** 8 of the 38-lots of this single-family subdivision located off MacElroy Road adjacent to Dutch Meadows are under construction.
11. **Vischer's Landing.** 20 homes are complete at this 22-lot custom home subdivision located on Vischer Ferry Road. The final home is expected to be completed next year.
12. **Windhover Farm.** Located off of Grooms Road near Miller Road, this 25-lot development does not currently have a timetable for construction.

In approved developments, Clifton Park has a total of 207 lots available for construction, all of which are planned for single family units.

Proposed Residential Developments

1. **Crescent Woods.** Preliminary approval is being sought for this 61 unit subdivision off of Crescent Road.
2. **Khan Subdivision.** 9 lots are proposed at this subdivision on Waite Road.
3. **Lapp Road.** Still under concept review, this 7 lot community will be located at 246 Lapp Road.
4. **Woodin Manor.** This 6 lot subdivision at 226 Woodin Ave is still in the conceptual stage.

Town of Halfmoon:

The Town of Halfmoon is largely within the Shenendehowa school district. While Clifton Park saw explosive growth in the late 20th Century, Halfmoon has only recently begun to see development turn in its direction. With ample developable land, Halfmoon is likely to be the center of new



development in the District.

Approved Residential Subdivisions

- 1. Anna's Place.** This 27- unit single-family subdivision is located off Werner Road. Currently 11 have been completed.
- 2. Arlington Heights.** This 74-unit single-family subdivision located off Farm to Market Road across from Kingsbrook is being built in two phases. Phase 1 is composed of 48 lots with 46 completed or under construction constructed. The second phase, with 26 additional lots, has 24 units completed or under construction.
- 3. Brookfield Place PDD.** Located on Harris Road. The subdivision has been completed.
- 4. Cardin Acres PDD.** 32 homes on this 36 lot development have been completed at this subdivision on Plant Road near Route 9.
- 5. Howland Park.** The PDD has been approved for this 96-lot single-family subdivision on Johnson Road, just west of Cary Road. 26 of the homes will be built within the Shenendehowa School District. 17 of these 26 homes have been completed or are under construction.
- 6. Inglewood PDD.** 23 of the 27-unit townhouses has been completed. Build-out is expected early in 2017.
- 7. Linden Woods.** Recently approved, this 87 lot single family development will be located off of Dunsbach Road. Infrastructure construction is expected in the Spring of 2017 with a timetable for construction of the housing units unclear at this time.
- 8. Meadows of Halfmoon.** This 53 lot single-family subdivision is located off Farm to Market Road. Infrastructure construction has not commenced and there is no timetable for build-out.
- 9. Mike Abele (Caranfa) Subdivision.** This 6 lot subdivision on Boyack Road has one completed unit. Development has been very slow and the owner is trying to restart development.
- 10. Orchard Point.** This 110 unit townhouse development is located off Plant Road. Construction has recently begun on the townhouses, with 9 completed. Build-out is expected to be slow.
- 11. Point West Townhomes.** 103 of the 118 townhouses are either complete or under construction at this development on Fellows Road.
- 12. Princeton Heights.** Located near Manchester Drive, and Dunsbach Road, this 51 lot single family home development has recently finished construction of the its infrastructure, and construction of the housing units is expected in mid to late 2017.



13. **Sandy Rock Subdivision.** Construction at this 19 lot development has been completed.
14. **Stone Crest Preserve.** 85 homes have been built at this 90-lot single-family subdivision at Werner and Vosburgh Roads. Build-out is expected in 2017.
15. **Swatling Falls PDD.** 54 units are either under construction or completed in this 95 unit development on Upper Newtown Road.
16. **Victor's Farm.** This 13 lot subdivision is located on Farm to Market Road. 6 units has been completed and full build-out is expected by 2019.
17. **Windsor Woods Subdivision.** This 28-lot subdivision on Vosburgh Road includes 22 single-family lots and 6 duplex units. 12 single family homes and 4 duplex units have been completed and build-out is expected within two years.

Town of Halfmoon: Proposed Residential Subdivisions

1. **Angle Road.** Approval is being sought for a 27 unit single-family development near the intersection of Cary Road and Farm to Market Road.
2. **Betts Farm PDD.** Approval is being sought for this PDD on Betts Lane. It will include 222 units: 120 single family homes, and 102 two family attached. All but three lots will be within the Shenendehowa Central School District.
3. **Creekview Estates.** Approval is being sought for a 61 unit single-family development on Upper Newtown Road.
4. **Halfmoon Village & Yacht Club.** Legislation for the PDD for this 244-unit condominium development on Beach Road has been approved.
5. **Woodloch.** This development of seven single-family detached units is slated for Cemetery Road and has been referred to the town engineer.

In major subdivisions, there are 292 approved, un-built single-family lots in the Shenendehowa area of Halfmoon, with an additional 122 approved and un-built apartments, townhomes, and twin homes in Halfmoon. With ample room for construction, the rate of development will depend on the housing market, which has only recently begun its recovery from the recent recession. With the large number of planned units, Halfmoon is expected to account for the largest portion of the School District's residential building activity.

Town of Malta

Only a small portion of southern Malta lies within the District. As a result, developable space is limited.

Approved Residential Subdivisions

1. **Maple Forest.** Located at 106 East Line, and Longkill Road, this 16 lot subdivision is slowly



being developed with 1 unit completed and 6 under construction.

Town of Malta: Proposed Residential Subdivisions

There are no new proposed residential subdivisions in the Town of Malta within the Shenendehowa School District.

Developable land within the Shenendehowa School District catchment area is limited in the Town of Malta. With the exception of a few vacant parcels, the area west of Round Lake is fully developed.

Village of Round Lake: Approved Residential Subdivisions

1. **Griffins Ridge.** Located off of Route 9, this 49 lot single family subdivision currently has one unit completed, and two under construction. Total build out is not expected until 2021
2. **Victorian Landing.** This 80-unit PDD town house development is located off Curry Avenue in the Village. There will be three units to each building. Construction has been slow, with only 30 units completed.

Individual single-family home development is extremely limited in the Village due to a lack of available vacant land. In total, there are 96 undeveloped lots within the Village of Round Lake, 33 of which are intended for single family homes and 74 are intended for townhouses.

Town of Stillwater

The small portion of Stillwater within the Shenendehowa School District has very few residential buildings. In 2013, the Town adopted a new zoning classification for the area (the Route 67 overlay district) which does not allow for any expansion of existing residential development, and is focused exclusively on commercial development. Thus, future residential development is highly unlikely.

Town of Waterford: Approved Residential Subdivisions

There are no approved residential subdivisions in the Town of Waterford within the Shenendehowa School District.

Town of Waterford: Proposed Residential Subdivisions

1. **Milltown Square Apartments.** This 32-unit apartment complex, comprised of three buildings, has had progress slowed due to a lawsuit. There will be 6 three-bedroom apartments, 14 two-bedroom apartments, and 12 one-bedroom apartments. It is located on Middle Pond Road. Approval has been difficult to secure and the projected is on an indefinite hold.

The portion of Waterford that lies within the Shenendehowa School District is largely built out. As a result, any single-family development is likely to be individual single-family homes or duplexes. There is little opportunity for large subdivisions.



In total, there are 843 undeveloped lots for single family homes and an additional 449 approved multifamily lots within the District. Most of this development is slated for the Town of Halfmoon which has shown steady growth despite the economic recession. Most importantly, growth is expected to remain stable and consistent for the immediate future. However, if the 843 single family homes were to be built at a faster rate than is projected, that could influence enrollment in ways that historical survival ratios cannot account for. As a result, continued monitoring of housing activity is required to ensure that new construction proceeds at the expected rate.

Five-Year Enrollment Projections

Table 7 provides a detailed overview of enrollment projections through the 2021-22 school year. Modifications were made to previous projections, resulting in a reversal of projected trends. Because of the size of enrollment in the District, the slightest change in survival multipliers can have a significant impact on future projections. Previously, CDRPC was projecting a slight decline in enrollment of 3.5% through 2020-21. Now, CDRPC is projecting a slight increase in enrollment of 1.8% through 2021-22. This modification in long term projections is accounted for in stronger than expected growth in the K-5 cohort. Previously, it had been projected that small Kindergarten classes would translate to smaller classes in grades 1-5, but the most recently available data suggests that the District is experiencing a greater influx of students into the elementary grades than anticipated. This influx resulted in the aforementioned discrepancy in projected enrollment vs actual enrollment for 2016-17. CDRPC now projects that this influx is the beginning of a longer term trend that will compensate for the lower number of births.

- Total enrollment in 2016-17, including self contained students, was 9,820. Driven in large part by projected growth in enrollment for grades K-5, total enrollment for the district is projected to increase throughout the projection period. Enrollment is projected to fall just shy of 10,000 student with 9,994 by 2021-22, an increase of 174 (1.8%) over 2016-17.
- Kindergarten enrollment will continue to slowly increase through the projection period. The strong number of births in 2014, over 700, is projected to help push Kindergarten above 600 students in 2019-20. Enrollment is not projected to rival the enrollment from the mid-aughts for the foreseeable future.
- While births for 2015 and 2016 are not projected to soar, they warrant close monitoring. As the oldest Millennials begin to enter their mid 30s there could be additional pressure to have children, especially for those that do not have children. For a generation that has pursued education at a higher rate than any previous generation, it is possible that a high number of women have delayed having a child. If this is true, then it is possible that at any time in the near future birth rates could increase. In the meantime, all that can be done is to monitor the situation.
- Long term trends in declining enrollment for grades K-5 are projected to reverse themselves. 2015-16 is projected to be the enrollment floor for K-5, and enrollment is projected to increase throughout the enrollment period and eventually reach 4,489 students in 2021-22. If the projections hold, this would be an increase of 329 (7.9%) in five years, an average of 66

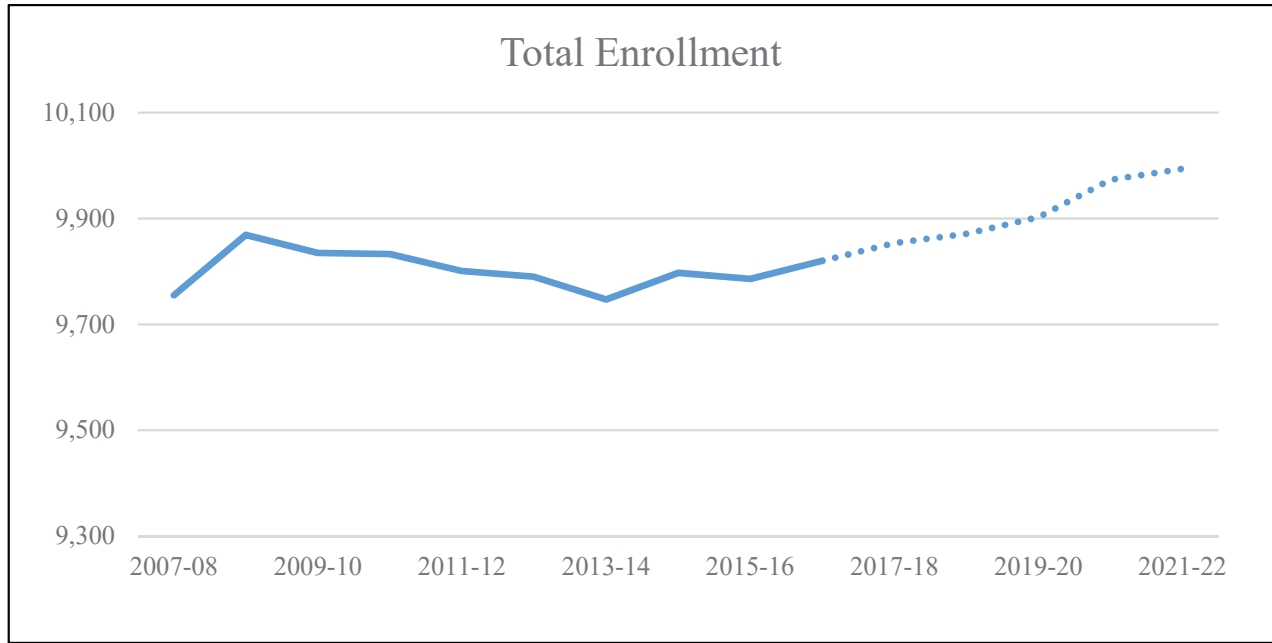


Figure 10. Total Enrollment: The District’s total enrollment is projected to increase throughout the projection period, approaching 10,000 students by 2021-22. This represents an increase of 1.8% and would result in a new enrollment peak for the District.

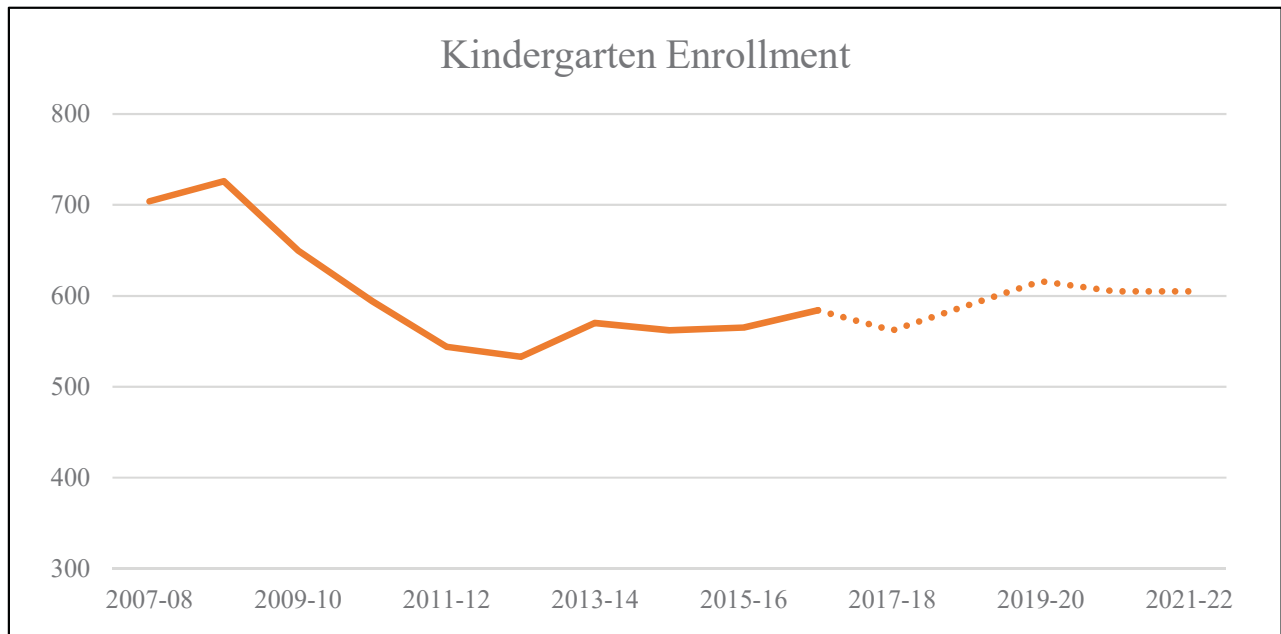


Figure 11. Kindergarten Enrollment. As projected, kindergarten enrollment will stabilize after a period of decline. While a minor increase is projected to raise enrollment to over 600 students, the primary trend is of stabilization. Even if anticipated increases in the number of births from Millennials occurs, it will not be reflected in Kindergarten enrollment until after the projection period.

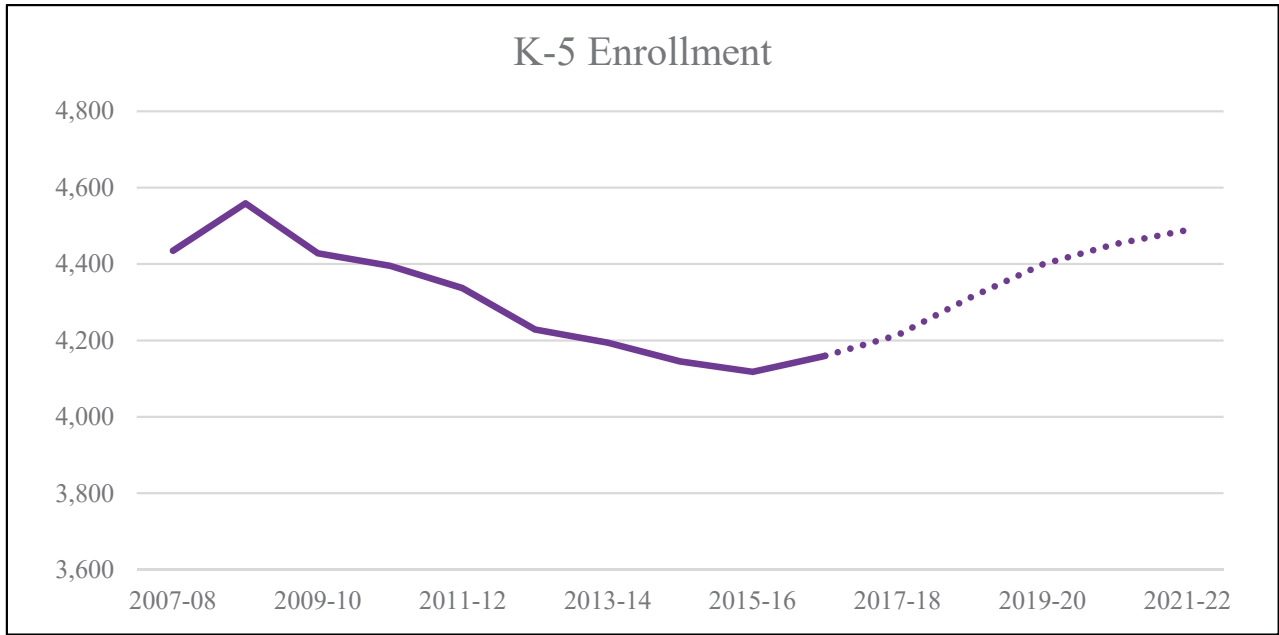


Figure 12. K-5 Enrollment. Gains in enrollment district-wide will primarily come from K-5. Gains are attributed to in-migration rather than large kindergarten classes. While the District’s half day kindergarten has historically resulted in a strong uptick in enrollment in 1st grade as parents enroll their children in the District after finding alternatives for kindergarten, recent trends show that strong enrollment gains are occurring in 2nd, 3rd, and 4th grades. This hints at children moving into the District after beginning school elsewhere.

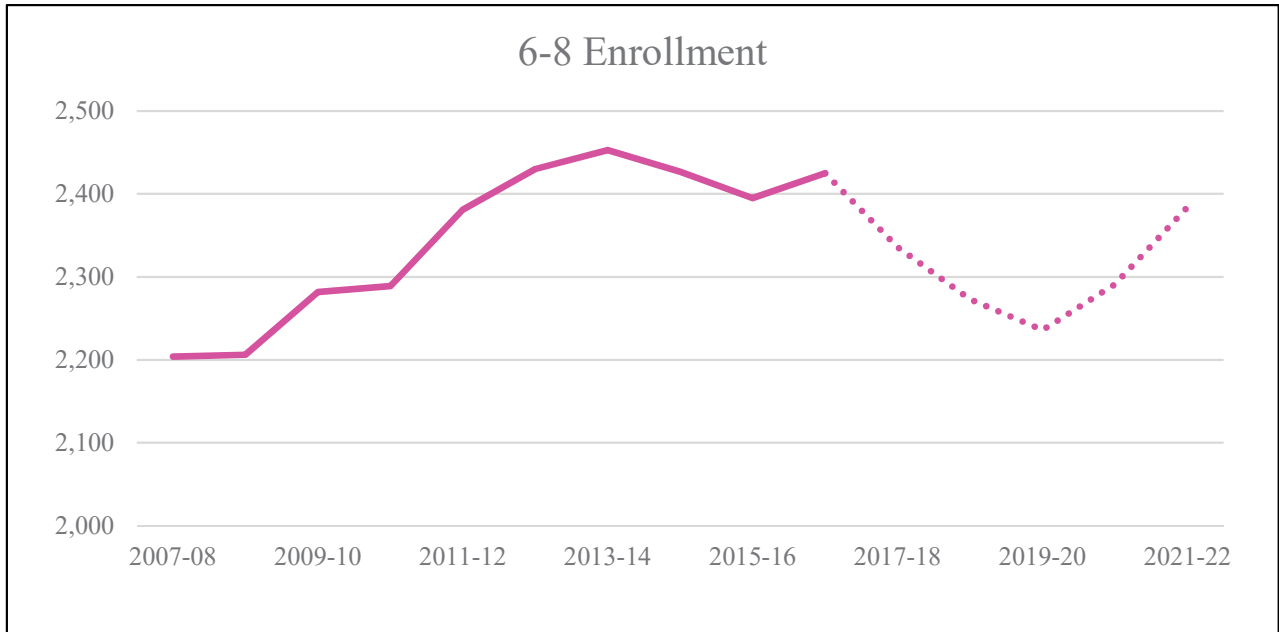


Figure 13. 6-8 Enrollment: Enrollment for grades 6-8 is projected to decrease sharply in the first three years of the projection period. This decline can be attributed to small classes in K-5 matriculating upwards into the 6-8 cohort. As K-5 enrollment improves, so will enrollment in grades 6-8 eventually. By the end of the projection period, enrollment is projected to rebound close to 2,400 students.

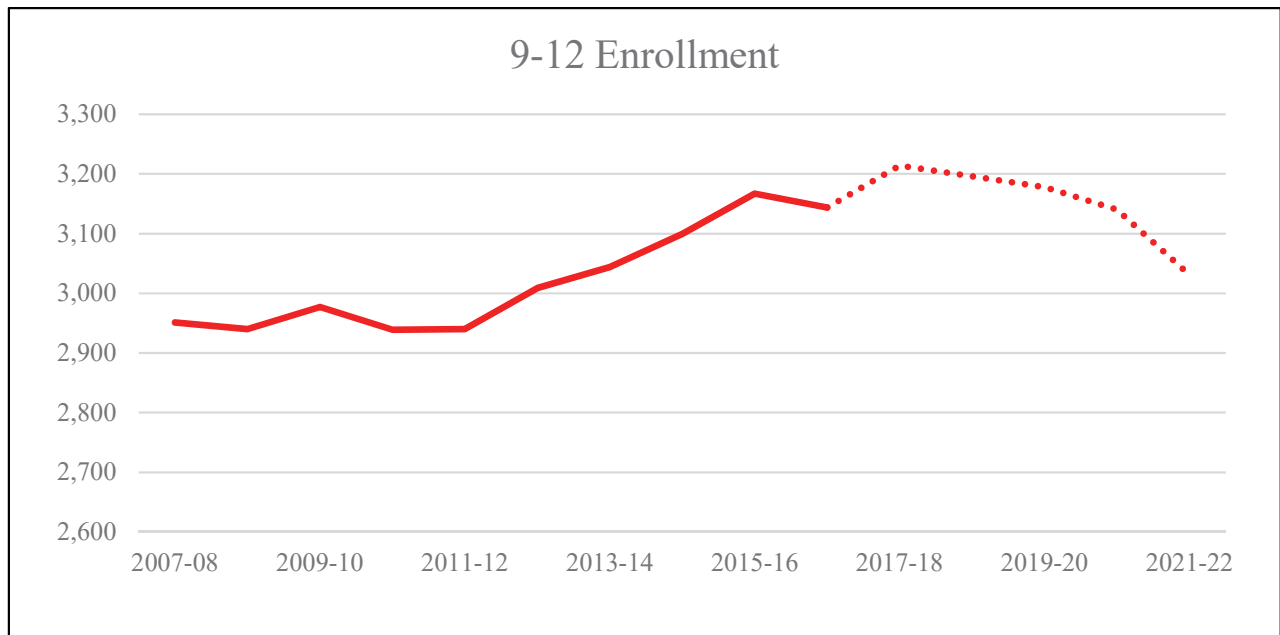


Figure 14. 9-12 Enrollment: The 9-12 cohort is projected to see enrollment peak in the 2017-18 school year with more than 3,200 students. Immediately following the peak, however, enrollment is projected to decline sharply to just over 3,000 by 2021-22. These declines may be short lived if the projected gains in both K-5 and 6-8 hold true.

new students a year. This growth in K-5 enrollment is suspected to originate from children entering the school district, predominately in 1st and 2nd grades. While it is common for 1st grade to see an influx of new students due to the District’s half day Kindergarten, in 2015-16 grades 2-4 all saw a strong influx of new students. This suggests that families are moving into the District with children of various ages, and not necessarily simply waiting to enroll their children in 1st grade.

- Enrollment in grades 6-8 are projected to experience a downturn after years of avoiding the declines that have been impacting K-5 for a number of years. After experiencing an expected increase in enrollment in 2016-17, enrollment is projected to decline through 2019-20. In 2019-20, enrollment is projected to be 2,236, a decline of 189 (7.8%) from 2016-17.
- In the short term, enrollment in grades 9-12 is projected to increase to 3,214 students in 2017-18, 70 (2.2%) greater than enrollment in 2016-17. This would mark an all time enrollment peak for the cohort. Following this, enrollment is projected to slowly decline through 2020-21 before declining very sharply in 2021-22. In 2021-22, enrollment is projected to decline to 3,031, 3.6% lower than enrollment in 2016-17. These declines are the results of smaller classes from the younger cohorts matriculating their way into the 9-12 cohort.
- Addressing a key point from projections made in the 2015-16 study: The kindergarten class of 2012-13 will continue to be a drag on the District’s enrollment. In 2016-17, this class has matriculated to 4th grade, and is 4.7% smaller than the 4th grade class from 2015-16, while



the 4th grade class of 2017-18 is projected to be 6.2% larger. Throughout the projection period, this class is projected to be smaller than the classes on either side and will mark a kind of dividing line where they will be the anomaly small class.

Conclusion

With enrollment projected to increase throughout the next five years, specifically with enrollment in K-5 projected to increase substantially, it suggests that young families are relocating to the District. While CDRPC did not determine that utilizing a demographic multiplier was appropriate at this time, the combination of persistent new housing construction, increasing existing home sales, and high survival multipliers for kindergarten through 4th grade, suggests that in the future demographic multipliers may be necessary in order to accurately project growing enrollment. Moreover, CDRPC is becoming concerned with the number of children that may be generated by the area's townhouses. Historically, townhouses do not generate many children, with hundreds of townhouses generating only a handful of children. However, trends in homeownership, generational preferences, and affordability may require research into the multipliers generated from multifamily housing. It may be possible that Millennials are approaching townhouses as a more affordable step to homeownership, and are not waiting for their classic single family detached home to start a family. As mentioned, this would reverse historical trends and would require research before it can be determined conclusively, but in the meantime, CDRPC will monitor the situation and see how it develops.

While the sales of new and existing homes require extensive monitoring due to their ability to immediately impact enrollment, the number of births in the District also require monitoring. Generation Z is a much smaller generation than the Millennials, and yet that has not translated to lower enrollment for Shenendehowa. If the District is still experiencing enrollment growth, then the expected bump in births from the Millennials could translate to very strong enrollment growth in the coming years. Unlike the immediate impact that home sales can have on enrollment, increased number of births are easier to monitor and have a delayed impact before they influence enrollment. If the anticipated increase in births does transpire, then the District should have ample time to prepare.

More immediately, the District should prepare for an overall increase in enrollment, especially in K-5 where more than 300 additional students are projected by 2021-22. Grades 6-8 are projected to endure a period of depressed enrollment before rebounding in 2020-21 and 2021-22. Finally, grades 9-12, the most insulated from changes in the younger cohorts, will see enrollment begin to decline by the end of the projection period.

Overall, Shenendehowa continues to be an attractive school district as is evident by the nearly unbroken trend of increasing enrollment for more than 20 years. There is no reason to expect that any major reversal of this trend should occur in the immediate future.



Tables

School Enrollment Projections for Shenendehowa Central School District



Appendix A
Shenendehowa Central School District
Status of Approved Major Single-Family Subdivisions

Subdivision Name	Total Number Planned	Complete/ Underway	2017	2018	2019	2020	2021
Town of Ballston							
The Estates at Kelley Farms	133	7	15	15	15	15	15
Timber Creek Preserve (Phase II)	67	5	15	15	17	20	—
Timber Creek Preserve (Phase IV)	95	—	—	—	10	10	10
<i>Sub-total</i>	295	12	30	30	42	45	25
Town of Clifton Park							
Bridlewood Ridge	32	26	6	—	—	—	—
Boni Miller Road	9	—	—	—	—	—	—
Carlson Farm	44	44	8	—	—	—	—
Diamond Point	10	3	4	3	—	—	—
Heritage Point	103	21	21	21	20	20	—
Honey Hollow	33	4	6	6	6	6	5
Kain Preserve	18	12	6	6	—	—	—
Mackey Kendra Dr Extension	8	2	3	3	—	—	—
Pickett Lane	6	1	2	2	1	—	—
Rolling Meadows	38	8	8	8	8	6	—
Vischer's Landing	22	20	2	—	—	—	—
Windhover Farm	25	—	—	—	5	5	5
<i>Sub-total</i>	348	141	66	49	40	37	10
Town of Halfmoon							
Anna's Place	27	11	8	8	—	—	—
Arlington Heights (Phase 1 and 2)	74	70	4	—	—	—	—
Brookfield Place PDD	81	81	—	—	—	—	—
Cardin Acres PDD	36	32	4	—	—	—	—
Howland Park	26	17	3	2	2	2	—
Linden Woods A & B	87	—	8	15	15	15	15
Meadows of Halfmoon	53	—	—	—	—	10	10
Mike Abele (Caranfa) Subdivision	6	1	—	1	1	1	1
Princeton Heights	51	—	—	5	5	5	5
Sandy Rock Subdivision	19	19	—	—	—	—	—
Stone Crest Preserve	90	85	5	—	—	—	—
Swatling Falls PDD	95	54	9	8	8	8	8
Victor's Farm	13	6	4	3	—	—	—
Windsor Woods	22	12	5	5	—	—	—
<i>Sub-total</i>	680	388	50	47	31	41	39
Town of Malta							
Maple Forest	16	1	7	8	—	—	—
<i>Sub-total</i>	16	1	7	8	—	—	—
Village of Round Lake							
Griffins Ridge	49	3	6	10	10	10	10
<i>Sub-total</i>	49	3	6	10	10	10	10
School District Total	1,388	545	159	144	123	133	84

Appendix B
Shenendehowa Central School District
Status of Approved Major Multi-Family Subdivisions

Subdivision Name	Total Number Planned	Complete/ Underway	2017	2018	2019	2020	2021
Town of Ballston							
Timber Creek Preserve (Phase II Twin)	32	—	16	16	—	—	—
Timber Creek Preserve (Phase III)	32	—	—	—	16	16	—
Timber Creek Preserve (Phase IV)	181	—	—	—	—	20	20
<i>Sub-total</i>	245	—	16	16	16	36	20
Town of Halfmoon							
Inglewood	27	23	4	—	—	—	—
Orchard Point	110	9	12	12	15	15	15
Point West Town Homes	118	103	7	8	—	—	—
Windsor Woods	6	4	2	—	—	—	—
<i>Sub-total</i>	261	139	25	20	15	15	15
Town of Waterford							
Milltown Square Apartments	32	—	—	—	—	—	—
<i>Sub-total</i>	32	—	—	—	—	—	—
Village of Round Lake							
Victorian Landings	80	30	25	25	—	—	—
<i>Sub-total</i>	80	30	25	25	—	—	—
School District Total	618	169	66	61	31	51	35

TABLE 1
Shenendehowa Central School District
Historical School Enrollment : 1997-1998 to 2016-2017

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
K	656	644	642	579	629	645	700	744	752	748	704	726	650	594	544	533	570	562	565	584
1	666	693	713	675	651	692	710	762	744	742	764	749	758	708	690	642	624	687	689	710
2	728	672	693	707	709	676	697	697	772	724	758	771	740	773	731	725	671	659	695	724
3	668	729	690	692	708	717	700	723	715	760	726	780	765	746	801	743	760	714	668	724
4	724	676	733	661	693	725	728	714	717	720	770	733	784	787	765	802	753	764	729	695
5	758	725	664	746	667	710	751	746	736	714	713	800	732	788	806	784	817	759	772	723
6	715	760	725	677	755	672	727	784	768	748	713	723	816	747	799	830	786	822	778	796
7	776	726	757	730	694	768	679	724	790	759	751	738	730	817	755	831	836	789	828	790
8	729	766	724	741	736	691	776	693	715	789	740	745	736	725	827	769	831	816	789	839
9	705	720	795	725	761	751	710	822	750	770	800	767	763	723	742	839	792	835	826	797
10	708	691	706	738	707	736	721	690	792	691	748	787	740	738	712	729	829	773	812	827
11	649	672	681	657	719	662	727	722	648	763	662	733	770	730	745	710	704	796	740	782
12	574	580	622	626	624	683	639	664	683	660	741	653	704	748	741	731	719	696	789	738
Self Contained	85	86	92	88	75	103	100	63	63	104	165	164	147	209	143	122	55	125	106	91
Total	9,141	9,140	9,237	9,042	9,128	9,231	9,365	9,548	9,645	9,692	9,755	9,869	9,835	9,833	9,801	9,790	9,747	9,797	9,786	9,820

Source: NYS Dept. of Education BEDS Data

TABLE 2
Shenendehowa Central School District
Aggregate School Enrollment : 1997-1998 to 2016-2017

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
K-5	4,200	4,139	4,135	4,060	4,057	4,165	4,286	4,386	4,436	4,408	4,435	4,559	4,429	4,396	4,337	4,229	4,195	4,145	4,118	4,160
6-8	2,220	2,252	2,206	2,148	2,185	2,131	2,182	2,201	2,273	2,296	2,204	2,206	2,282	2,289	2,381	2,430	2,453	2,427	2,395	2,425
9 - 12	2,636	2,663	2,804	2,746	2,811	2,832	2,797	2,898	2,873	2,884	2,951	2,940	2,977	2,939	2,940	3,009	3,044	3,100	3,167	3,144
Self Contained	85	86	92	88	75	103	100	63	63	104	165	164	147	209	143	122	55	125	106	91
Total	9,141	9,140	9,237	9,042	9,128	9,231	9,365	9,548	9,645	9,692	9,755	9,869	9,835	9,833	9,801	9,790	9,747	9,797	9,786	9,820

Source: NYS Dept. of Education BEDS Data

TABLE 3
School District Births
Shenendehowa Central School District

<u>Year of Birth</u>	<u>Number of Births</u>	<u>Year to Enter Kindergarten</u>	<u>Kindergarten Students</u>	<u>Survival Ratio</u>
2002	730	2007-08	704	0.9644
2003	736	2008-09	726	0.9864
2004	760	2009-10	650	0.8553
2005	706	2010-11	594	0.8414
2006	686	2011-12	544	0.7930
2007	680	2012-13	533	0.7838
2008	632	2013-14	570	0.9019
2009	625	2014-15	562	0.8992
2010	685	2015-16	565	0.8248
2011	607	2016-17	584	0.9621
2012	624	2017-18	562	<i>0.9000</i>
2013	672	2018-19	589	<i>0.8772</i>
2014	702	2019-20	616	<i>0.8772</i>
2015	690	2020-21	605	<i>0.8772</i>
2016	690	2021-22	605	<i>0.8772</i>

Projections in italics

Source: NYS Department of Health Bureau of Health Statistics, Resident Live Births

TABLE 4
Shenendehowa Central School District
Number of Housing Units

Year	Single Unit		2 Unit	3 or 4 Unit	5 or more	MH	Total
	1- Det	1- Att					
1980							13,412
1990							19,356
2000							22,126
2010							26,548
2010-14	16,559	2,287	963	1,839	4,760	1,137	27,545

1- Det = Single Family Detached **1- Att**= Single Family Attached **2 Unit**= Duplex **3 or 4 Unit** = Apartment/ Condominium **5 or more**
= Large Apartment/Condominium **MH** = Mobil Home

Source: Data for 1980 and 1990 from CDRPC enrollment reports; Data for 2000 from the "Census 2000 School District Tabulation Supplement (STP2S) Table H30" accessed from the National Center for Education; Data for 2010 from the 2010 Census Table H1; 2010-14 American Community Survey B25024 accessed through American Fact Finder

TABLE 5
Building Permit Issuances

Clifton Park

Year	Single Unit	2 Unit	3 or 4 Unit	5 or more	Total
1996	140	-	-	-	140
1997	154	-	-	-	154
1998	230	-	-	-	230
1999	213	-	4	-	217
2000	253	2	-	-	255
2001	278	-	-	-	278
2002	308	-	-	-	308
2003	338	-	-	-	338
2004	207	6	-	-	213
2005	107	-	-	-	107
2006	93	-	-	-	93
2007	80	-	-	-	80
2008	26	-	-	-	26
2009	61	-	-	-	61
2010	70	-	-	-	70
2011	57	-	-	-	57
2012	95	-	-	-	95
2013	75	-	-	-	75
2014	48	-	-	-	48
2015	34	-	-	-	34

Halfmoon

Year	Single Unit	2 Unit	3 or 4 Unit	5 or more	Total
1996	69	4	12	138	223
1997	98	6	-	18	122
1998	119	8	16	16	159
1999	82	12	-	28	122
2000	86	4	-	-	90
2001	93	-	-	17	110
2002	126	-	4	-	130
2003	104	-	-	-	104
2004	174	-	-	-	174
2005	109	-	-	-	109
2006	148	-	12	-	160
2007	157	-	-	66	223
2008	124	-	-	88	212
2009	130	-	4	66	200
2010	128	-	8	41	177
2011	113	-	-	99	212
2012	175	-	4	76	255
2013	182	-	-	155	337
2014	127	2	27	-	156
2015	156	30	52	0	238

Table 6
Shenendehowa Central School District MLS Data

	# of units sold	Average Sale Price	Median Sale Price	Average DOM
2014	836	\$300,771	\$280,250	66
2015	889	\$300,590	\$280,000	55
2016*	623	\$304,284	\$287,500	50

*Represents January 1st through August 31st

TABLE 7
Shenendehowa Central School District
Enrollment Projections : 2017-2018 to 2021-2022

Grade	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
K	584	562	589	616	605	605
1	710	718	691	724	757	744
2	724	739	747	719	754	788
3	724	754	770	778	749	785
4	695	738	769	785	794	764
5	723	703	746	777	793	803
6	796	737	716	760	792	808
7	790	808	748	727	771	804
8	839	791	809	749	728	772
9	797	852	803	821	760	739
10	827	784	838	790	808	748
11	782	801	759	812	765	783
12	738	777	796	755	807	761
Sub-Total	9,729	9,764	9,781	9,813	9,883	9,904
Self Contained*	91	90	90	90	90	90
Total	9,820	9,854	9,871	9,903	9,973	9,994
Aggregate Enrollment Projections : 2017-2018 to 2021-2022						
Grade	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22
K-5	4,160	4,214	4,312	4,399	4,452	4,489
6-8	2,425	2,336	2,273	2,236	2,291	2,384
9-12	3,144	3,214	3,196	3,178	3,140	3,031
Sub-Total	9,729	9,764	9,781	9,813	9,883	9,904
Self Contained*	91	90	90	90	90	90
Total	9,820	9,854	9,871	9,903	9,973	9,994

2016-17 Represents Actual Fall Enrollment

* Represents self-contained 1st-12th grade students



Capital District Regional Planning Commission

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